

*ABSTRACT AMENDMENTS*

Replace the Abstract with:

A substrate ~~whereon a~~ supporting film to be etched is held on a rotating stage. Ultraviolet light having a wavelength of 200 nm or shorter ~~is radiated from first lamps to~~ irradiates the film in air, thereby removing organic coatings ~~formed on a surface of~~ from the film and making the surface of the film hydrophilic. A chemical solution is ~~coated on~~ applied to the hydrophilic film while rotating the substrate. Ultraviolet light having a wavelength longer than 200 nm is radiated from second lamps ~~to~~ and onto the film through the chemical solution.